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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,541	08/29/2001	Takaya Sato	0171-0778P-SP	4738

2292 7590 07/20/2004

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EXAMINER
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CREPEAU, JONATHAN

ART UNIT	PAPER NUMBER
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1746

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/940,541	<b>Applicant(s)</b> SATO ET AL.
	<b>Examiner</b> Jonathan S. Crepeau	<b>Art Unit</b> 1746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. This Office action addresses claims 1-6 and newly added claims 7 and 8. Claims 1, 3, and 6 remain rejected under 35 USC 103 for substantially the reasons of record, and claims 2, 4, 5, 7, and 8 are newly rejected for these reasons, as necessitated by amendment. Accordingly, this action is made final.

### ***Claim Rejections - 35 USC § 103***

2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 10-208708 in view of JP 2000-173564.

Regarding claims 1 and 3, JP 10-208708 is directed to a lithium battery comprising a cell structure group formed by folding an integral body of the unit cell (see Fig. 1). The unit cell comprises electrode material layers laminated through a separator (5) (see Fig. 1). The cell further comprises an electrolyte (see paragraph 17 of the machine translation). Regarding claims 2, 3, 4, and 5, the outer periphery of the cell structure is covered with an ion impermeable and extensible high polymer sheet (65) (see abstract; Figures 1 and 2). The high polymer sheet has a tensile elongation percentage of 500-1000%, which is anticipatory of the range recited in claims 2, 4, and 8. Regarding claims 6 and 7, the polymer may be polypropylene (see paragraph 17). Regarding claims 1 and 3, the battery comprises a battery container (foil 61), which is covered

with a PET layer (62) on the outer surface thereof. Regarding the recitation in claims 1 and 3 that the electrolyte is poured in the battery container after the cell structure group is contained therein, this is a process limitation that does not further limit the structure of the claimed product. Accordingly, the limitation is given little patentable weight (MPEP §2113).

JP '708 does not expressly teach the battery container (61) is covered with an ion impermeable and extensible high polymer sheet having a tensile elongation percentage of 1% or more, as recited in claims 1 and 3.

JP 2000-173564 is directed to a thin battery bag body comprising an elastic thin film outer layer (see abstract; Figure 1). The layer may comprise an olefin elastomer or a styrene elastomer (see paragraph 17 of the machine translation).

Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the artisan would be motivated by the disclosure of JP '564 to use a highly elastic thin film as the outer layer of the bag of JP '708. In the abstract, JP '564 teaches that "the outer rubber layer 6 is provided on the whole face of the surface of the bag body 1 so that the impact absorbing property can be drastically increased while holding the flexibility of the bag body 1." This disclosure would motivate the artisan to use the elastic rubber outer layer of JP '564 as the outer layer of JP '708. Although JP '564 does not appear to teach the exact tensile elongation value of the elastic outer layer, the artisan would be motivated to use a value within the range disclosed by JP '708 (i.e., 500-1000%) because the tensile elongation percentage is a measure of the elasticity of a material. Accordingly, the instantly claimed subject matter would be rendered obvious to the skilled artisan.

***Response to Arguments***

3. Applicant's arguments filed May 14, 2004 have been fully considered but they are not persuasive. Applicants state, regarding the JP '708 and '564 references, that "the battery container is made of the laminated film containing both the metal foil and the high polymer sheet. [...] Unlike in JP '708 and in JP '564, in this invention the battery container and the high polymer sheet are not laminated and united." However, it is submitted that the instant claims merely require that the outer peripheral surface of the battery container be "covered" with a high polymer sheet. This is believed to encompass embodiments where the container and the sheet are laminated or united. In the JP '708 reference, it is submitted that the foil (61) may be defined as the battery "container," and thus, layer 62 would be the polymer sheet covering the outer peripheral surface of the container. Again, it is noted that the language employed in the instant claims does not preclude the interpretation of the foil of JP '708 as a "container." Applicants refer to the Figures of the instant application to point out the structure of the battery container (6) and how such is different from the structures of the JP references. However, it is believed that this is an attempt to read limitations into the claims from the specification. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The instant claims do not define the structure or composition of the battery container and do not preclude the interpretation which has been employed herein. As such, the rejection over the JP references is maintained.

*Conclusion*

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

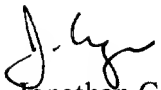
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr, can be reached at (571) 272-1414. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

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may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jonathan Crepeau

Patent Examiner

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July 16, 2004